



# Missouri Nursery Pest News

Office of the State Entomologist  
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## Recent Observations:

Recently hatched bagworms have been observed in SE Missouri (5/23/03). Be on the lookout for this damaging insect pest, especially on spruce, juniper, and arborvitae. They can be easily controlled when small, though they often go undetected until the damage has been done. You should expect to see newly hatched larvae in central Missouri within the next week or so, and in northern Missouri within two weeks.

Japanese beetle adults will be emerging soon. Adults feed on a wide variety of plant material including roses, hornbeam, purple leaf plum, and many others. Adults can be controlled with a variety contact insecticides (carbaryl, etc.). As adults mate and lay eggs in turf areas effective larval control can be achieved with products like imidichloprid (Merit/Marathon).

Larry Hanning, SE Missouri Plant Protection Specialist, contributed to this article.

## For more information:

*The Bagworm in Missouri* – MU Guide G7250

<http://muextension.missouri.edu/explorepdf/agguides/pests/G07250.pdf>

## **BAGWORMS**

*Thyridopteryx ophomeraoformis*

Lepidoptera: Psychidae

### **I. DESCRIPTION: Bagworms**

- Larva is brown in color over the head and thorax, and the rest of the body enclosed in the bag is lighter in color. Bag is composed of silk and leaves/twigs of host plant; approximately 2 inches when fully developed.
- Adult male is rarely encountered, but is a winged moth with a furry black body and pale wings. Adult female is maggot-like, wingless, almost legless, enclosed in the bag.

### **II. HOSTS: Bagworms**

- Practically all deciduous and evergreen shrubs and trees serve as suitable hosts for this pest.
- Particularly severe on junipers, arborvitae, and spruce.

### **III. DAMAGE: Bagworms**

- Done by larval feeding on foliage of host, which begins immediately upon hatch.
- Plants can be stripped of foliage in a very short time, especially young/ small trees
- Plants are weakened and become vulnerable to attack by other insects and diseases; they may be killed by successive years of attack.

### **IV. LIFE CYCLE: Bagworms**

- Overwinters as eggs inside the pupal skin inside the old bag that contained the female.
- Eggs hatch in early June to mid-June in central Missouri
- Larva make bags from silk and bits of leaves; 4 molts in the summer period
- Larvae pupate in early September, remaining in their bags.
- Adult males emerge in fall and fly around in search of female, who remains within her bag. After mating, the female lays 500-1000 eggs in the bag, and then falls to the ground and dies.

### **V. INSPECTION TIPS: Bagworms**

- Look for needle covered bags hanging from twigs and branches; when first hatched may be very difficult to see.
- Trees will have a ragged, "Christmas tree" appearance later in season.

### **VI. CONTROL TIPS: Bagworms**

- Apply a recommended insecticide in June to kill the larvae, which are most easily controlled when young. Stomach poisons generally work best.

### **VII. CULTURAL AND BIOLOGICAL CONTROL: Bagworms**

- Handpick bags off plants in the winter and destroy them. *Bacillus thuringiensis* works well on young bagworm larvae.

**Remember:** Before using any chemical, always read the label carefully for directions on application procedures, appropriate rates, first aid, storage, and disposal. Make sure chemical is properly registered for use on the intended pest. Any products named are not intended as endorsements, nor is criticism implied of similar products that are not mentioned.